

## Energy Overview

**Note 1. Primary Energy Production.** Primary energy production consists of coal production, waste coal supplied, and coal refuse recovery; crude oil and lease condensate production; natural gas plant liquids production; natural gas (dry) production; nuclear electricity net generation (converted to Btu using the nuclear plants heat rate); conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate); geothermal electricity net generation (converted to Btu using the geothermal plants heat rate), geothermal heat pump energy, and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate); wood and wood-derived fuels consumption; biomass waste (municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass) consumption; and biofuels feedstock (biomass inputs to the production of fuel ethanol and biodiesel).

**Note 2. Primary Energy Consumption.** Primary energy consumption consists of coal consumption; coal coke net imports; petroleum consumption (petroleum products supplied, including natural gas plant liquids and crude oil burned as fuel, but excluding ethanol blended into motor gasoline); natural gas (excluding supplemental gaseous fuels) consumption; nuclear electricity net generation (converted to Btu using the nuclear plants heat rate); conventional hydroelectricity net generation (converted to Btu using the fossil-fueled plants heat rate); geothermal electricity net generation (converted to Btu using the geothermal plants heat rate), and geothermal heat pump and geothermal direct use energy; solar thermal and photovoltaic electricity net generation (converted to Btu using the fossil-fueled plants heat rate), and solar thermal direct use energy; wind electricity net generation (converted to Btu using the fossil-fueled plants heat rate); wood and wood-derived fuels consumption; biomass waste (municipal solid waste from biogenic sources, landfill gas, sludge waste, agricultural byproducts, and other biomass) consumption; fuel ethanol and biodiesel consumption; losses and co-products from the production of fuel ethanol and biodiesel; and electricity net imports (converted to Btu using the electricity heat content of 3,412 Btu per kilowatthour).

**Note 3. Merchandise Trade Value.** Import data presented are based on the customs value. That value does not include insurance and freight and is consequently lower than the cost, insurance, and freight (CIF) value, which is also reported by the Bureau of the Census. All export data, and import data prior to 1981, are on a free alongside ship (f.a.s.) basis.

“Balance” is exports minus imports; a positive balance indicates a surplus trade value and a negative balance indicates a deficit trade value. “Energy” includes mineral

fuels, lubricants, and related material. “Non-Energy Balance” and “Total Merchandise” include foreign exports (i.e., re-exports) and nonmonetary gold and Department of Defense Grant-Aid shipments. The “Non-Energy Balance” is calculated by subtracting the “Energy” from the “Total Merchandise Balance.”

“Imports” consist of government and nongovernment shipments of merchandise into the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, and the U.S. Foreign Trade Zones. They reflect the total arrival from foreign countries of merchandise that immediately entered consumption channels, warehouses, the Foreign Trade Zones, or the Strategic Petroleum Reserve. They exclude shipments between the United States, Puerto Rico, and U.S. possessions, shipments to U.S. Armed Forces and diplomatic missions abroad for their own use, U.S. goods returned to the United States by its Armed Forces, and in-transit shipments.

### Table 1.5 Sources

U.S. Department of Commerce, Bureau of the Census, Foreign Trade Division:

#### Petroleum Exports

1974-1987: “U.S. Exports,” FT410, December issues.  
1988 and 1989: “Report on U.S. Merchandise Trade,” Final Revisions.  
1990-1992: “U.S. Merchandise Trade,” Final Report.  
1993-2006: “U.S. International Trade in Goods and Services,” Annual Revision.  
2007 and 2008: “U.S. International Trade in Goods and Services,” FT-900, monthly.

#### Petroleum Imports

1974-1987: “U.S. Merchandise Trade,” FT900, December issues, 1975-1988.  
1988 and 1989: “Report on U.S. Merchandise Trade,” Final Revisions.  
1990-1993: “U.S. Merchandise Trade,” Final Report.  
1994-2006: “U.S. International Trade in Goods and Services,” Annual Revision.  
2007 and 2008: “U.S. International Trade in Goods and Services,” FT-900, monthly.

#### Energy Exports and Imports

1974-1987: U.S. merchandise trade press releases and database printouts for adjustments.  
1988: January-July, monthly FT-900 supplement, 1989 issues. August-December, monthly FT-900, 1989 issues.  
1989: Monthly FT-900, 1990 issues.  
1990-1992: “U.S. Merchandise Trade,” Final Report.  
1993-2006: “U.S. International Trade in Goods and